RUDENKO, N.P.; KALINKINA, O.M.

Preparation of some radioactive indicators. Vest. Mosk. un. Ser. 2: Khim. 20 no.6:83-85 N-D '65. (MIRA 19:1)

1. Laboratoriya radiokhimii Nauchno-issledovatel'skogo instituta yadernoy fiziki Moskovskogo universiteta. Submitted Jan. 13, 1965.

BEDESKU, A.; KALINKINA, O.M.; SOROKIN, A.A.; FORAFONTOV, N.V.; SHPINEL', V.S.

Decay scheme of Te^{131m}. Zhur. eksp. i teor. fiz. 40 no.1:91-100 Ja '61. (MIRA 14:6)

1. Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta.

(Tellurium—Decay)

S/075/62/017/009/006/006
E071/E436

AUTHORS: Kalinkina, O.M., Rudenko, N.P.

TITLE: On the problem of preparation of hafnium 8-hydroxyquinolinate of a definite composition

PERIODICAL: Zhurnal analiticheskoy khimii, v.17, no.9, 1962, 1120-1121

TEXT: The precipitation of hafnium 8-hydroxyquinolinate using a nascent reagent is carried out by adding an alcoholic solution of 8-hydroxyquinoline to a solution of hafnium nitrate containing oxalic acid. An increase in the pH of the solution was obtained by the decomposition of urea on heating. On the basis of chemical and thermogravimetric analysis the composition of the precipitate was hafnium β-hydroxyquinolinate $Hf(C_9H_6NO)_4$. There is 1 figure.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova (Moscow State University imeni M.V.Lomonosov)

SUBMITTED: April 20, 1962

Card 1/1

KALINKINA, O.M.; RUDENKO, N.P.

Preparation of hafnium 8-hydroxyquinolinate of a definite composition. Zhur.anal.khim. 17 no.9:1120-1121 D '62.
(MIRA 16:2)

1. Institute of Nuclear Physics, M.V. Lomonosov Moscow State University.

(Hafnium compounds)
(Quinolinol)

KULENKO, Nikolay Pavlovich; KUZNETSOVA, Ol'ga Mikhaylovna; POLOSHKINA, V.A., red.

[Radioactive isotopes of zirconium and niobium $Zr^{95} - Nb^{95}$ and $Zr^{97} - Nb^{97}$] Radioaktivnye izotopy tsirkoniia i niobiia $Zr^{95} - Nb^{95}$ i $Zr^{97} - Nb^{97}$. Moskva, Atomizdat, 1964. 24 p. (MIRA 17:10)

L 52979-65 EWT(m) Peb DIAAP

ACCESSION NR AM5009853 BOOK EXPLOITATION 3/

Rudenko, Nikolay Pavlovich; Kalinkina, Ol'ga Mikhaylovna

Radioactive isotopes of zirconium and niobium; Zr^{95} - Nb^{95} and Zr^{97} - Nb^{97}
[Radioaktivnyye izotopy tsirkoniya i niobiya; Zr^{95} - Nb^{95} and Zr^{97} - Nb^{97}]
M., Atomizdat, [illegible], 1 illus., bibliog., [illegible] copies printed.

TOPIC TAGS: radioactive isotope, zirconium, niobium, radioactive tracer

PURPOSE AND COVERAGE: The radioactive isotopes of Zr^{95} and Nb^{95} are widely used

TABLE OF CONTENTS [abridged]:

Card 1/2

ACCESSION NR AM5009853

Introduction -- 3
Ch. I. Radioactive and stable isotopes of zirconium and niobium and their radiometry -- 5

SUBMITTED: 14Jul64

SUB CODE: NP, GC

NR REF SOV: 012

OTHER: 007

Card 2/2

ACCESSION NR: AP4043038 S/0077/64/009/004/0286/0288

AUTHORS: Kalinkina, T. A.; Kovanova, A. N.; Pankova, A. A.; Sukhodrev, N. K.; Uvarova, V. M.; Shpol'skiy, N. R.

TITLE: NIKFI photographic materials for the vacuum ultraviolet region of the spectrum and their characteristics

SOURCE: Zhurnal nauchnoy i prikladnoy fotografii i kinematografii, v. 9, no. 4, 1964, 286-288

TOPIC TAGS: ultraviolet photographic film, film characteristic, film sensitivity, silver halide, / ISP 22 spectrograph, DFS 6 vacuum spectrograph

ABSTRACT: The solution of many problems has been hampered by the lack of photographic film sensitive to the vacuum ultraviolet (UF) spectrum ($\lambda < 2200$ Å) as a consequence of strong absorption in the gelatin of the emulsion layer of existing film. NIKFI developed five types of films sensitive to the far UF and soft x-ray region by using a new method of preparing photographic emulsion with a high concentration of silver halide in which a large portion of the gelatin is replaced by surface active substances. The five films differed in size of the AgHal microcrystals and had different sensitivities. The air-dried emulsion layer $\sim 10\,\mu$.

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ACCESSION NR: AP4043038

thick was coated on a triacetate base and hardened so that water at temperatures up to 100C did not melt it. The photographic properties of the film (see Table 1 on the Enclosure) were measured in the visible, near UF region ($\lambda \sim 2300$ Å) and vacuum UF region (2000 Å $> \lambda >$ 200 Å). The films UF-2 and UF-3 were developed for 8 minutes in developer D-19 at 20C and the other film developed similarly for 4-6 minutes. The standard method of sensitometric measurements was used for the visible region; for $\lambda = 2300$ Å a mercury lamp in a ISP-22 spectrograph with a nine-stage attenuator was used. Characteristic curves (D versus log It) were obtained for all films at $\lambda = 2300$ Å. Films UF-1, UF-2 and UF-3 have low visible sensitivity ideal for "hot" object work. The vacuum UF region was studied using a DFS-6 vacuum spectrograph with a low voltage vacuum spark between titanium electrodes as a light source. The relative spectral sensitivities of films UF-1, UF-2, and UF-3 were obtained at points over the range 200-3000 Å and the contrast factor for these films for λ 200-800 Å ranged from 0.7 to 1.0, while the other films had a smaller contrast. The storage properties were good and were maximized by storage in a polyethylene pack at 5-7C (e.g., UF-1 stored two years lost 40% of its sensitivity at $\lambda = 2300$ Å, had no hazing, and preserved its contrast). The preservation of the film was attributed to the high colloidal stability

Card 2/4

ACCESSION NR: AP4043038

of the AgHal microcrystals and the presence of colloidal stabilizers in the emulsion layer. Orig. art. has: 1 table and 2 figures.

ASSOCIATION: Vsesoyuzny*y nauchno-issledovatel'skiy kinofotoinstitut (NIKFI) (All-Union Motion Picture and Photography Scientific Research Institute)

SUBMITTED: 080ct63 ENCL: 01

SUB CODE: OP,ES NO REF SOV: 002 OTHER: 000

Card 3/4

ACCESSION NR: AP4043038

ENCLOSURE: 01

Sample No.	Film type	Region of registration of UF-radiation Å	Average diameter of AgHal Micro-crystals μ	Characteristic properties: fog density D_o	For visible region of spectrum: $S_{0.2}$ GOST units	γ	For λ=2300 Å: S, relative units	γ
1	UF-1	<3500	0.35	0.06	5	4	2.5	1
2	UF-2	<2200	0.29	0.04	0.5	4	0.25	1.2
3	UF-3	<1500	0.18	0.04	0.8	2.4	0.08	0.9
4	UFSh-1	3500--2000	1.16	0.09	50	2	8.0	0.9
5	UFSh-2	<3500	1.16	0.11	50	3.6	8.0	1.2

Table 1

GOST is All-Union State Standard.

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L 3150-66 EWT(1)/T/EED(k)-3 IJP(c)

ACCESSION NR: AP5016054 UR/0368/65/002/005/0475/0478

771.533

AUTHORS: Kalinkina, T. A.; Oshurkova, A. N.; Pankova, A. A.; Uvarova, V. M.; Chistova, G. I.; Shpol'skiy, M. R.

TITLE: NIKFI photographic materials for spectral analysis in the ultraviolet region of the spectrum

SOURCE: Zhurnal prikladnoy spektroskopii, v. 2, no. 5, 1965, 475-478

TOPIC TAGS: uv spectroscopy, uv photography, photographic material, photographic emulsion

ABSTRACT: The authors describe briefly the assortment of photographic materials developed for the registration of the ultraviolet region of the spectrum. The spectral sensitivity of the materials and the dependence of the contrast of the emulsions on the wavelength of the applied radiation is reported. It is shown that emulsions having a high content of silver halide exhibit an increase in the absolute sensitivity of the layers in the ultraviolet region of the spectrum

Card 1/2

L 3150-66

ACCESSION NR: AP5016054

3

compared with the visible region. The deviation from the reciprocity law for prolonged exposures is determined for some types of emulsions. The resolution of the material is claimed to be sufficiently high even in thecase of the coarse-grain emulsions UFSh-O. A table summarizing the characteristics and some of the characteristic curves are included. Orig. art. has: 4 figures and 1 table.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy kinofotoinstitut (All-Union Scientific-Research Institute of Motion Picture Photography)

SUBMITTED: 00 ENCL: 00 SUB CODE: ES, OP

NR REF SOV: 004 OTHER: 000

Card 2/2

KALINKINA, V.A. (Moskva), KOZLOVA, N.I. (Moskva), NIKOLAYEV, I.N. (Moskva), STEPANCHIKOV, A.A. (Moskva)

Investigating the thermal decomposition of coals and their mixtures. Izv. AN SSSR. Otd. tekh. nauk. Met. i topl. no.6:156-160 N-D '60. (MIRA 13:12)

(Coal--Carbonization)

NIKOLAYEV, I.N.; STEPANCHIKOV, A.A.; DAVYDOVA, K.I.; KOZLOVA, N.I.; KALINKINA, V.A.; SMIRNOVA, M.I.

Method for the direct determination of the coking capacity of coals and charges. Koks i khim. no.11:9-15 '60. (MIRA 13:11)

1. Institut goryuchikh iskopayemykh AN SSSR.
(Coal--Testing) (Coke)

DAVYDOVA, K.I. (MOSKVA); SMIRNOVA, M.I. (Moskva); KALINKINA, V.A. (Moskva); SPEPANCHIKOV, A.A. (Moskva)

Chita Province coals as possible raw materials for the metallurgical industry of Transbaikalia. Izv. AN. SSSR. Otd. tekh. nauk. Met. i topl. no.2:163-169 Mr-Ap '61. (MIRA 14:4)
(Chita Province--Coal mines and mining)
(Transbaikalia--Metallurgical plants)

NIKOLAYEV, I.N.; KOZLOVA, N.I.; KALINKINA, V.A.; STEPANCHIKOV, A.A.

Heat capacity of coals and coal mixtures as determined by the temperature of their heating. Koks. i khim. no. 3:12-15 '61. (MIRA 14:4)

1. Institut goryuchikh iskopayemykh AN SSSR.
(Coal--Thermal properties)

KALINKINA, Ye.G.

Puncture specimens from the lymph nodes and their diagnostic significance. Vop. epid. i klin. tub. 5:234-240 '58.
(MIRA 14:12)

(LYMPHATICS--PUNCTURE)

137-58-4-7741

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 4, p 198 (USSR)

AUTHORS: Goncharevskiy, M. S., Kalinkina, Z. M.

TITLE: Corrosion Resistance of Welds of Electrically Welded Tubing (Korrozionnaya stoykost' shva elektrosvarnykh trub)

PERIODICAL: Byul. nauchno-tekhn. inform. Vses. n.-i. trubnyy in-t, 1957, Nr 3, pp 48-55

ABSTRACT: Problems of the quality of a weld of electrically welded tubing, its resistance and corrosion under atmospheric conditions, under various conditions of fabrication, in chemically active mediums, and so forth, are discussed. The corrosion strength of the seam was studied both in tubing not subject to annealing and in normalized tubes: a) for atmospheric corrosion--in a fog chamber (3 percent NaCl solution) and an apparatus for intermittent immersion; b) for submarine and other chemical corrosion in various fluid media--in a spindle apparatus. The test specimens were cut in the form of 70x30 mm segments from 57 and 76 mm diameter tubes of cold-rolled steel (Nrs 10 and 20) made on 51-152 mm electric welders. The specimens were taken from parallel positions: one containing the weld, the other from the diametrally

Card 1/2

137-58-4-7741

Corrosion Resistance of Welds of Electrically Welded Tubing

opposite side. To determine the effect of the degree of cold deformation of the metal on its corrosion resistance, flat specimens (100x28x1.5 mm) having degrees of deformation that increased along their length (5-53 percent) were tested, and similar tests were made of cylindrical specimens with 3, 35, 57, and 79 percent reduction. The tests were run in an 0.5-percent H_2SO_4 solution. It was established that: (1) The corrosion resistance of the seam and the parent metal of unannealed electrically welded tubes was virtually identical in service under industrial, marine, and other mediums of pH>3. (2) In acid solutions in which pH>3, the seams of unannealed electrically welded tubes have a corrosion resistance only one-third or one-fourth that of the parent metal. The same is noticed in an alternating medium (sea water -air). (3) After normalization of electrically welded tubes, the corrosion resistances of the seam and of the parent metal equalize regardless of test conditions. However, in an acid medium (0.5 percent H_2SO_4 solution), annealed electrically welded tubes have only one-fifth the resistance of those that had not been annealed. (4) Work-hardening of metal (reduction $\leq$25 percent) increases its resistance to corrosion in a 0.5 percent H_2SO_4 solution. (5) Non-normalized electrically-welded tubing may be employed instead of seamless tube in structural tubing for cars and tractors (for water, petroleum, and gas), and in ammonia refrigerators.

A. L.

Card 2/2

1. Welds--Corrosion--Test results 2. Steel tubing--Applications

TOBILEVICH, N.Yu.; ZASYAD'KO, I.N.; MATEUSH, Ya.O.; VOLOSHKO, D.M.; KALINKINA, Z.M.; SHCHESNO, L.P.

Increasing the corrosion resistance of heat exchanging pipes for the sugar industry. Sakh. prom. 31 no.4:47-53 Ap '57. (MLRA 10:6)

1. TSentral'nyy nauchno-issledovatel'skiy institut sakharnoy promyshlennosti (for Tobilevich, Zasyad'ko and Mateush). 2. VNITI (for Shchesno).

(Pipe) (Corrosion and anticorrosives)

VOLOSHKO, D.M., inzh.; KALINKINA, Z.M., inzh.; SHCHESNO, L.P., inzh.

Corrosion of pipes in evaporators in sugar refineries. Biul.nauch.-tekh.inform.VNITI no.4/5:143-153 '58. (MIRA 15:1)
(Pipe, Steel--Corrosion)
(Sugar manufacture--Equipment and supplies)

VOLOSHKO, D.M., inzh.; KALINKINA, Z.M., inzh.

Using electrode potentials as criteria in selecting metals for diffusion-calorizator pipes in sugar refineries. Biul.nauch.-tekh.-inform.VNITI no.4/5:153-157 '58. (MIRA 15:1)
(Sugar manufacture--Equipment and supplies)
(Pipe, Steel--Corrosion)

KALINKO, M.

All-Union conference on the standaridization of methods and apparatus used in studying oil and gas reservoir rocks. Geol. neft i gaza 6 no.10:64-65 O '62. (MIRA 15:12)
(Oil sands)

KALINKO, M.; RAABEN, V.

Discussing the most important questions of oil and gas geology.
Geol. nefti i gaza 8 no.8:60-62 Ag '64. (MIRA 17:8)

KALINKO, M.K.

Principle regularities of the distribution of oil and gas pools and a hypothesis on their inorganic origin. Trudy VNIGNI no.27: 39-47 '60.

Mechanics and conditions of the formation of mud volcanoes. Trudy VNIGNI no.27:98-136 '60. (MIRA 17:3)

KALINKO, M. K.

53/49T78

USSR/Minerals Oct 48
Analysis

"Distribution of Heavy Minerals in Fractions of Various Diameters and the Action of This Factor on the Exactness of Mineralogical Analyses," M. K. Kalinko, Sci Res Sec, Mining Geol Adm, Main Adm for Main Northern Sea Route, 3 pp

"Dok Ak Nauk SSSR" Vol LXII, No 5

PA 53/49T78

Analysis based on tables showing variation in percent of the content of various heavy minerals by fractions of various diameters and of their granulometric composition shows that increased accuracy and exclusion of the effect of such

53/49T78

USSR/Minerals (Contd) Oct 48

composition must be obtained by use of smaller fractions. Submitted by Acad D. S. Belyankin, 19 Aug 48.

53/49T78

KALINKO, M.

Subject : USSR/Engineering AID P - 216

Card : 1/1

Author : Kalinko, M.

Title : Shortcomings of the "Companion of the Petroleum Geologist (Petrologist)"

Periodical : Neft. khoz., v. 32, #3, 62-64, Mr 1954

Abstract : Comments on a handbook edited by Prof. N. B. Vassoyevich (Gostoptekhizdat, M-L, 1952). Evaluation of various chapters for practical use and suggestions for a new revised edition.

Institution : None

Submitted : No date

KALINKO, M.K.

New geological measuring instruments. Geol.sbor. no.3:293-313 '55. (MLRA 8:6)

(Geology) (Measuring instruments)

KALINKO, M.K.

Tectonic plan of the Anabar and Khatanga interfluvial area. Trudy Nauch.-issl. inst. geol. Arkt. 89:294-299 '56. (MIRA 11:1)
(Anabar Valley--Geology, Structural)
(Khatanga Valley--Geology, Structural)

KALINKO, M.K.

Permian and Triassic terrigenous materials in the northern part of middle Siberia. Dokl.AN SSSR 108 no.1:131-134 My '56. (MLRA 9:8)

1. Nauchno-issledovatel'skiy institut geologii Arktiki. Predstavleno akademikom N.M. Strakhovym.
(Siberia--Geology, Stratigraphic)

RUKHIN, Lev Borisovich, prof., doktor geologo-mineralogicheskikh nauk, red.; SERDYUCHENKO, D.P., prof., doktor geologo-mineralogicheskikh nauk, red.; TATARSKIY, Vitaliy Borisovich, prof., doktor geologo-mineralogicheskikh nauk, red.; KALINKO, M.K., kandidat geologo-mineralogicheskikh nauk, red.; RENGARTEN, N.V., kandidat geologo-mineralogicheskikh nauk, red.; RUSAKOVA, L.Ya., vedushchiy red.; YASHCHURZHINSKAYA, A.B., tekhn.red.

[Reference manual on the petrography of sedimentary rocks; two volumes] Spravochnoe rukovodstvo po petrografii osadochnykh porod; v dvukh tomakh. Leningrad, Gos.nauchno-tekhn.izd-vo neft. i gorno-toplivnoi lit-ry, Leningr. otd-nie. Vol.1. [Conditions of formation, characteristics and minerals of sedimentary rocks] Usloviia obrazovaniia svoistva i mineraly osadochnykh porod. 1958. 485 p. Vol.2. [Sedimentary rocks] Osadochnye porody. 1958. 519 p. (MIRA 11:2)
(Rocks, Sedimentary)

KALINKO, M.K.; SHIRYAYEV, I.Ye.

Petroleum and gas resources of northern Siberia. Sov.geol. 1 no.12:69-87 D '58. (MIRA 12:4)

1. Nauchno-issledovatel'skiy institut geologii Arktiki i Vsesoyuznyy nauchno-issledovatel'skiy geologorazvedochnyy neftyanoy institut.
(Siberia--Petroleum geology)
(Siberia--Gas, Natural--Geology)

KALINKO, M.K.

General classification of oil and gas reservoir rocks. Geol. nefti 2 no.7:44-52 Jl '58. (MIRA 11:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologorazvedochnyy neftyanoy institut.
(Rocks--Classification and nomenclature)

AUTHOR: Kalinko, M.K. SOV/5-58-4-18/43

TITLE: Basic Regularities in the Distribution of Oil and Gas in the Earth's Crust and the Hypothesis of Their Inorganic Origin (Osnovnyye zakonomernosti respredeleniya v zemnoy kore nefti i gaza i gipoteza neorganicheskogo ikh proiskhozhdeniya)

PERIODICAL: Byulleten' Moskovskogo obshchestva ispytateley prirody, Otdel geologicheskiy, 1958, Nr 4, pp 144-145 (USSR)

33

ABSTRACT: This is a summary of a report given by the author at a conference of the Moscow Society of Naturalists on 25 March 1958. The author considers the basic regularities in the distribution of oil and gas in the Earth's crust, and gives a detailed explanation in favor of the hypothesis of their organic origin as against the hypothesis of their inorganic origin.

1. Petroleum--Geology 2. Petroleum--Sources 3. Petroleum--Theory

Card 1/1

KALINKO, M.K.

Oil and gas prospecting in the Anabar-Khatanga interfluve (Nordvik region). Trudy NIIGA 92:134-170 '58.
(MIRA 13:4)

(Anabar Valley--Petroleum geology)
(Anabar Valley--Gas, Natural--Geology)
(Khatanga Valley--Petroleum geology)
(Khatanga Valley--Gas, Natural--Geology)

KALINKO, M.K.

Oil and gas potentials of the northern part of central Siberia.
Trudy NIIGA 92:183-214 '58. (MIRA 13:4)
(Siberia--Petroleum geology)
(Siberia--Gas, Natural--Geology)

KALINKO, Mikhail Kuz'mich; GEDROYTS, N.A., nauchnyy red.; DAYEV, G.A., vedushchiy red.

[Geological development and oil and gas potentials of the Khatanga depression] Istoriia geologicheskogo razvitiia i perspektivy neftegazonosnosti Khatangskoi vpadiny. Leningrad, Gos. nauchn.-tekhn. izd-vo neft. i gorno-toplivnoi lit-ry. Leningr. otd-nie. 1959. 358 p. (Leningrad. Nauchno-issledovatel'skii institut geologii Arktiki. Trudy, vol. 104). (MIRA 12:12)

(Siberia, Eastern--Petroleum geology)
(Siberia, Eastern--Gas, Natural--Geology)

KALINKO, M. K., Doc Geolog-Mineralog Sci (diss) -- "The history of the geological development and oil-and-gas content of the Khatanga Valley". Leningrad-Moscow, 1959. 30 pp (Min Geology and Protection of Natural Resources USSR, Sci Res Inst of the Geol of the Arctic, All-Union Sci Res Geological-Prospecting Petroleum Inst), 150 copies (KL, No 24, 1959, 129)

SOV/11-59-1-15/16

AUTHOR: Kalinko, M.K.

TITLE: On the "English-Russian Geological Dictionary" (Ob "Anglo-Russkom geologicheskom slovare")

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geologicheskaya, 1959, Nr 1, pp 125-126 (USSR)

ABSTRACT: This is a review of the above mentioned dictionary, compiled by T.A. Sofiano.

Card 1/1

KALINKO, M.K.

Analyzing the granulometric composition of terrigenous heavy minerals in order to determine their migration routes. Sov. geol. 2 no.12:19-23 D '59. (MIRA 13:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologorazvedochnyy neftyanoy institut.
(Mineralogy)

KALINKO, M.

"Origin of oil and formation of pools" by M.F.Al'tovskii, Z.Kuznetsova, R.M.Shvets. Reviewed by M.Kalinko. Geol.nefti i gaza 3 no.6:55-3 of cover. Je '59. (MIRA 12:8)
(Petroleum geology) (Al'tovskii, M.F.) (Kuznetsova, Z.I.) (Shvets, R.M.)

KALINKO, M.K.

Permian stratigraphy of the Anabar-Khatanga interfluve. Trudy NIIGA 96:25-60 '59. (MIRA 13:5)
(Anabar Valley--Geology, Stratigraphic)
(Khatanga Valley--Geology, Stratigraphic)

KALINKO, M.K.

General factors governing the formation of various mud volcanoes.
Inform. biul. NIIGA no.19:15-21 '60. (MIRA 13:12)
(Mud volcanoes)

KALINKO, M.K.

First All-Union Conference on Fractured Oil and Gas Reservoirs.
Sov. geol. 3 no.10:165-168 0'60. (MIRA 13:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskiy neftyanoy institut.
(Petroleum geology) (Gas, Natural--Geology)

MILLER, Don Dzh.[Miller, D.J.]; PEYN, Tomas G.[Payne, T.G.]; GRIK, Dzh. [Gryc, George]; BALASHOVA, M.V.[translator]; KALINKO, M.K., doktor geol.-miner. nauk; SHOKOKHOVA, L.I., ved. red.; VORONOVA,V., tekhn. red.

[Geology of possible petroleum provinces in Alaska] Geologiia neftegazonosnykh provintsii Aliaski. Pod red. i s dopolneniiami M.M. Kalinko. Moskva, Gostoptekhizdat, 1961. 181 p. (MIRA 16:6)
(Alaska--Petroleum geology)

GRIBERG, I.S.; KALIKO, M.I.; PUK, P.S.; SOROKOV, D.S.

Further trends in oil prospecting in the basic promising regions of northern Siberia. Trudy NIIGA 12:95-101 '61. (NIIPA 14:10)

(Russia, Northern ... petroleum geology)

KALINKO, M.K.

Results of prospecting for oil and gas in Alaska. Trudy NIIGA no.125:126-134 '61. (MIRA 16:7)
(Alaska--Petroleum geology)
(Alaska--Gas, Natural--Geology)

KALINKO, M.K.

Conference on physical investigation methods of sedimentary rocks and minerals. Sov. geol. 4 no.8:158-161 Ag '61.
(MIRA 16:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskiy neftyanoy institut.

(Rocks, Sedimentary) (Minerals)

RUKHIN, Lev Borisovich, prof.[deceased]; RUKHINA, Ye.V., kand.geol.-min.nauk. Prinimali uchastiye: SARANCHINA, G.M., dots.; FRANK-KAMENETSKIY, V.A., dots.; KALINKO, M.K., doktor geol.-miner. nauk; VASSOYEVICH, N.B., prof., red.; TOKAREVA, T.N., ved. red.; YASHCHURZHINSKAYA, B.Ya., tekhn. red.

[Fundamen'als of lithology; theory of sedimentary rocks] Osnovy litologii; uchenie ob osadochnykh porodakh. Izd.2.,perer.i dop. E.V.Rukhinoi. Pod red. N.B.Vassoevicha. Leningrad, Gos.nauchno-tekhn.izd-vo neft. i gorno-toplivnoi lit-ry, 1961. 779 p. (MIRA 15:2)

1. Leningradskiy gosudarstvennyy universitet (for Saranchina, Frank-Kamenetskiy). 2. Vsesoyuznyy nauchno-issledovatel'skiy geologo-razvedochnyy neftyanoy institut (for Kalinko).
(Rocks, Sedimentary)

KALINKO, M.

"Petroleum, gas, and solid bitumens in igneous and metamorphic rocks" by N.A.Kudriavtsev. Reviewed by M.Kalinko. Geol. nefti i gaza 5 no.4:45-50 Ap '61. (MIRA 14:4)
(Petroleum geology) (Kudriavtsev, N.A.)

KALINKO, M.K.

Some results of oil and gas prospecting in capitalist countries.
Geol. nefti i gaza 6 no.6:53-58 Je '62. (MIRA 15:6)
(Petroleum geology)
(Gas, Natural—Geology)

DICKENSTEIN, G.K., KALINKO, M.K. MAKSIMOV, S.P. KHALTURIN, D.S.

"Efficient methods of finding new oil and gas beds in less explored regions."

Report submitted to the Conf. on the Application of Science and Technology for the Benefit of the Less Developed Areas.
Geneva, Switzerland 4-20 February 1963

KALINKO, M.K.

Basic results of prospecting for oil and gas in capitalist countries, 1961. Geol.nefti i gaza 7 no.2:50-60 F '63.
(MIRA 16:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologorazvedochnyy neftyanoy institut.
(Petroleum geology) (Gas, Natural--Geology)

KALINKO, Mikhail Kuz'mich; KHANIN, A.A., red.; SAVINA, Z.A., ved. red.; YAKOVLEVA, Z.I., tekhn. red.

[Methods for studying the rezervoir properties of cores]Metodika issledovaniia kollektorskikh svoistv kernov. Moskva, Gostoptekhizdat, 1963. 223 p. (MIRA 16:4)
(Oil reservoir engineering---Equipment and supplies)
(Oil sands--Analysis)

KALINKO, M.K.

Petroleum production in capitalist countries in 1962. Geol. nefti i gaza 7 no.6:56-3 of cover Je '63. (MIRA 16:9)

KALINKO, M.K.

Principal results of and trends in world oil prospecting.
Sov. geol. 6 no.7:3-13 Jl '63. (MIRA 16:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologorazvedochnyy neftyanoy institut.

KALININ, N.A.; KALINKO, M.K.

Concerning the book "Geology and the oil and gas potential of the West Siberian Plain; a new oil center of the U.S.S.R." Geol. nefti i gaza 7 no.10:59-61 O '63. (MIRA 17:10)

KALINKO, M. K.

"Geological factors determining regularities in the distribution of oil and hydrocarbon gas deposits in the earth crust."

Report submitted for 22nd Sess, Intl Geological Cong, New Delhi, 14-22 Dec 1964.

KALINKO, Mikhail Kuz'mich; IOFIS', F.A., red.

[Basic regularities in the distribution of oil and gas in the earth's crust] Osnovnye zakonomernosti rasprostraneniia nefti i gaza v zemnoi kore. Moskva, Izd-vo "Nedra," 1964. 206 p. (MIRA 17:7)

KALINKO, M.K.; SHAKS, I.A.

Discussion on the methods of studying oils, gases, and organic matter in rocks. Sov. geol. 7 no.10:163-165 O '64.
(MIRA 17:11)

KIROV, V.A.; KALINKO, M.K.

Concerning the collection of articles "Conditions for the formation of oil and gas fields in some oil and gas regions of the U.S.S.R." Geol. nefti. i gaza 8 no.10:53-56 O '64. (MIRA 17:12)

MALINKO, M.K.

Mud volcanoes, their origin, development, and extinction.
Trudy VNIGNI no.40:30-55 '64. (MIRA 17:6)

KALENKO, M.K.

Possibility of the presence of oil on Venus. Geol.nefti i gaza 9 no.2:3 of cover F '65. (MIRA 18:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologorazvedochnyy neftyanoy institut.

KALINKO, M.K.

Results of oil and gas prospecting achieved in some foreign countries in 1963-1964. Geol. nefti. i gaza 9 no.7:52-60 Je '65. (MIRA 18:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologorazvedochnyy neftyanoy institut, Moskva.

L 22722-66

ACC NR: AP6002931 (A) SOURCE CODE: UR/0286/65/000/024/0098/0098

AUTHORS: Kalinko, M. K.; Khromov, M. V.

ORG: none

TITLE: Apparatus for determining gas permeability of rocks. Class 42, No. 177148

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 24, 1965, 98

TOPIC TAGS: permeability measurement, gas diffusion

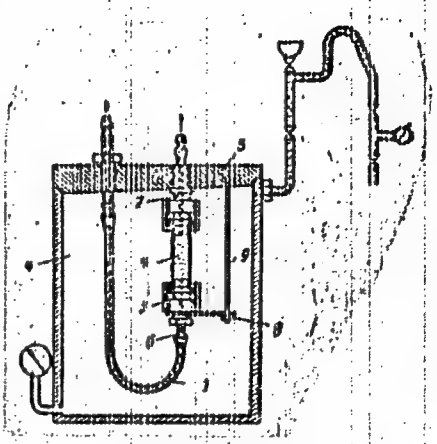
ABSTRACT: This Author's Certificate describes apparatus for determining the gas permeability of rocks. The apparatus consists of a rubber tube for holding the sample, nipples, tubes with valves and T-junctions, a reducer for creating pressure, and a manometer. To produce uniform confining pressure on the sample and to examine samples of various sizes, the device is made in the form of a hermetically sealed container filled with liquid (see Fig. 1). In this container a system for mounting the sample is placed. It consists of two connecting pipes, the upper one set in the top of the container and the lower connected through a nipple to a flexible hose for supplying gas to the sample. The lower connecting pipe is squeezed against the sample by a clamping fork screwed into a rod attached to the top of the container.

Card 1/2 UDC: 550.844

L 22722-66

ACC NR: AP6002931

Fig. 1. 1 - Sample; 2 and 3 - connecting pipes; 4 - reservoir of container; 5 - top of container; 6 - nipple; 7 - flexible hose; 8 - clamping fork; 9 - fixed rod.



Orig. art. has: 1 figure.

SUB CODE: 14, 08/ SUBM DATE: 18Apr62

Card 2/2 UCR

KALINKOV, M.

Some problems of extragalactic astronomy. Fiz mat spisanie BAN 6 no. 2:97-113 '63.

KALINKOV, M.

Distribution of meteors by stellar magnitudes. Astron.zhur. 41 no.2:419-421 Mr-Ap '64. (MIRA 17:4)

1. Sektor astronomii Bolgarskoy Akademii nauk.

KALINKOV, M.

Conference of observers of the artificial satellites of the earth from the socialists countries. Spisanie BAN 6 no.2:101-103 '61.

KALINKOV, M.

Two radiants of meteors. Astron.tsir. no.218:17-18 F '61.
(MIRA 14:7)

1. Sektsiya astronomii Bolgarskoy Akademii nauk.
(Meteors)

KALINKOV, M.; RAYKOVA, D.

Radiants of meteors. Astron.tsir. no.218:18-19 F '61. (MIRA 14:7)

1. Sektsiya astronomii Bolgarskoy Akademii nauk.
(Meteors)

KALINKOV, M.

Observations of eclipses and occultations of the first two satellites of Jupiter. Astron.tsir. no.218:22 F '61. (MIRA 14:7)

1. Sektsiya astronomii Bolgarskoy Akademii nauk.
(Satellites--Jupiter)

KALINKOV, M.; RUSEV, R.

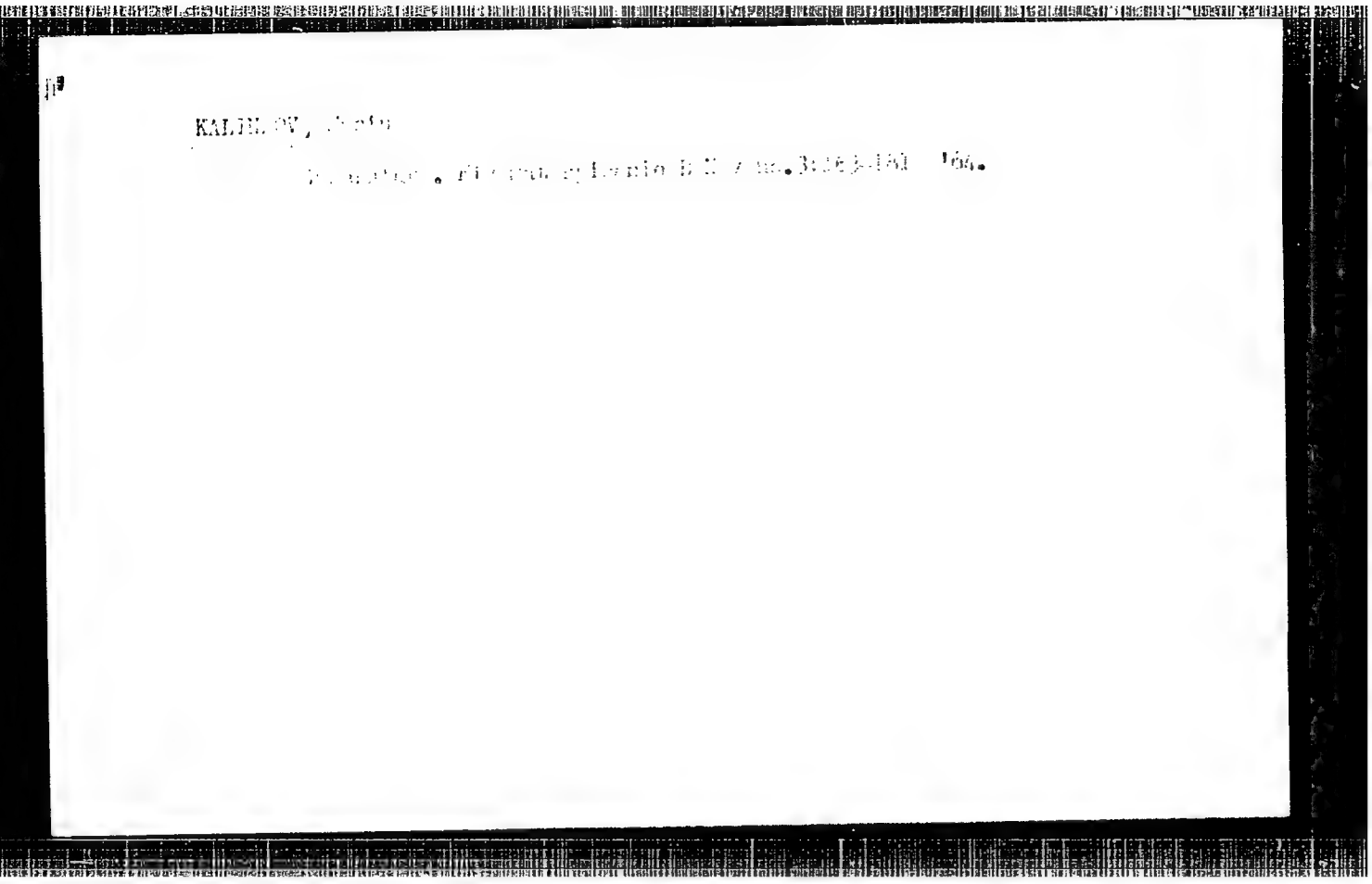
Visual observations of Perseids in Sofia in 1961. Astron. tsir. no.229:29-30 Je '62. (MIRA 16:6)

1. Sektor astronomii Bolgarskoy Akademii nauk.
(Meteors—August)

KALINKOV, M.

Visual observations of Perseids in 1959. Astron. tsir. no.229: 30-32 Je '62. (MIRA 16:6)

1. Sektor astronomii Bolgarskoy Akademii nauk.
(Meteors—August)



L 32221-66 FBD GW/WS-2

ACC NR: AP6020836 SOURCE CODE: BU/0011/65/018/006/0509/0512

AUTHOR: Nedyalkov, I; Kalinkov, M.

ORG: Astronomical Section, BAN; Institute of Physics BAN

TITLE: Hypothesis of quasi-stellar radio sources

SOURCE: Bulgarska akademiya na naukite. Doklady, v. 18, no. 6, 1965, 509-512

TOPIC TAGS: cosmic radio source, scintillation, galaxy, star

ABSTRACT: The discovery of powerful star-like radio sources of the 3C273 and 3C48 type resulted in the formulation of various hypotheses aiming at the explanation of their characteristics. Basically, all the hypotheses may be classified as scintillation and nonscintillation (gravitational collapse) hypotheses. This paper presents a new scintillation-type hypothesis which, under certain assumptions, describes well the physical characteristics of superstars (such a star is assumed to consist of a thin plasma shell in equilibrium with a photon gas filling). Results seem to indicate that the superstars are formations connected generically with explosive galaxies (E. M. Burbidge, G. R. Burbidge, V. C. Rubin, ApJ., 140, 1964, 942). Orig. art. has: 11 formulas. [Orig. art. in Eng.] [JPRS]

SUB CODE: 03, 20 / SUBM DATE: 15Feb65 / OTH REF: 012 / SOV REF: 003

Card 1/1

L 34734-66 EWT(1) IJP(c) GW

ACC NR: AP6025119 SOURCE CODE: BU/0012/65/008/001/0008/0027

36
B

AUTHOR: Kalitsin, Nikola; Kalinkov, Marin

ORG: none

TITLE: Astronomical effects of the general theory of relativity

SOURCE: Fiziko-matematicheska spisanie, v. 8, no. 1, 1965, 8-27

TOPIC TAGS: general relativity theory, celestial mechanics, gravitation red shift, Mercury planet

ABSTRACT: This is a comprehensive survey of the present status of the astronomical effects which serve as confirmation of the general theory of relativity. Starting with the classic arguments concerning the motion of the perigee of the planet Mercury and other celestial bodies and the light deflection near celestial bodies, it proceeds to the gravitational red shift and the most recently investigated effects of the theory (Eotvos-Dicke inertial-heavy mass equivalence measurements, Lense-Turing-Schiff effect, stellar period increase on very eccentric orbits, Hvolson effect, negative mass hypothesis). Orig. art. has: 6 figures. [JPRS: 32,859]

SUB CODE: 20, 03 / SUBM DATE: none

LS

L 43145-66 EWT(1) IJP(c) GW

ACC NR: AP6018923 SOURCE CODE: UR/0203/66/006/003/0581/0582

AUTHOR: Kalinkov, M.

ORG: Astronomy Department, Bulgarian Academy of Sciences (Sektor astronomii Bolgarskoy Akademii nauk)

TITLE: Concerning one Einstein effect

SOURCE: Geomagnetizm i aeronomiya, v. 6, no. 3, 1966, 581-582

TOPIC TAGS: solar activity, gravitation field, solar corona

ABSTRACT: It is pointed out that the solar activity may affect one observable Einstein effect, the deflection of light rays in the sun's gravitational field. Statistical calculations show that there is a certain correlation between such deflections and the solar activity. For the six total solar eclipses of 1919, 1922, 1929, 1936, 1947, and 1952, the weighted mean value of $\alpha = 1".93 \pm 0".05$, and the arithmetic mean $\alpha = 2".03 \pm 0".10$ differs from the theoretically predicted value $\alpha = 1".75$. Comparison of these six observed values of α with the solar activity shows that there is a statistical correlation between them. The correlation coefficients r between these six observed deflections and the corresponding Wolf numbers R (daily, monthly, and yearly) are considered. The largest (negative) r occurs for observed α values and ellipticity of the solar corona at a distance $2R_\odot$ in a standard cycle. Fig. 1 shows observed values of yearly Wolf numbers R, ellipticity of the solar corona in a stand-

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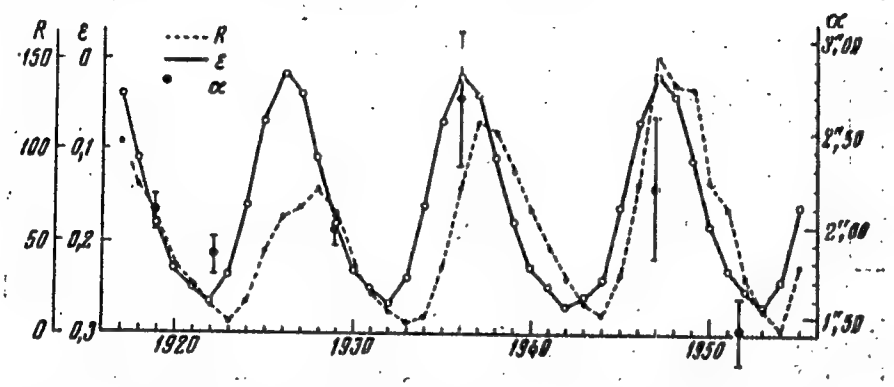
L 4314-66

ACC NR: AP6018923

ard cycle ϵ, and values of α with the corresponding error. The disagreement between the course of R and ϵ is apparent. The increase of r between α and ϵ, when R lags behind ϵ by 1-2 years, is noteworthy. It is quite possible that, as indicated by these results, the solar activity affects the observed deflection of light rays in the sun's gravitational field. It is postulated that this influence is exerted via the outer solar corona. Orig. art. has: 1 figure.

Fig. 1.



SUB CODE: 03/ SUBM DATE: 27Aug65/ SOV REF: 002 / OTH REF: 003

Card 2/2 MLP

L 05377-67

ACC NR: AT6031509 SOURCE CODE: BU/2503/66/014/000/0147/0158

13
12
13+1

AUTHOR: Kalitsin, N.; Kalinkov, M.

ORG: none

TITLE: Supergiant stars as massive condensations

SOURCE: Bulgarska akademiya na naukite. Fizicheski institut. Izvestiya na Fizicheskiya institut s ANEB, v. 14, 1966, 147-158

TOPIC TAGS: galaxy, star cluster, supergiant star, star association

ABSTRACT: The characteristics of a suggested new model of a star are determined. On the basis of the works of Iben, Chandrasekhar, and Tooper, the mass of the supergiant star should be $10^4 M_\odot$, when a pulsation instability appears. A similar mass is obtained by extrapolation of existing empiric mass-luminosity relations. The formula of Hoyle and Fowler produces a larger mass, but the average $10^{4\pm0,5} M_\odot$ is in conformity with theoretical examinations. Extrapolation of the empiric mass-radius relations ($M = 10^4 M_\odot$) leads to $R \approx 10^3 R_\odot \approx 7.10^{13}$ cm. The brightness of the described model of a non-stationary object varies owing to pulsation instability. It is shown that the variations in brightness may be due to expansion of the shells, if results of statistical analysis of the light curve of supergiant stars

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L 05399-67

ACC NR: AT6031509

(1 explosion/day) are applied, and if the mass flow is assumed to be 10^{30}g/explosion, at an observed velocity of flow of 5.10^8 cm/sec. On the surface, the optical depth of the shell is tau $\approx$20, and at a distance $(4 \div 5)R$ it is already tau < 1. This increases the observed effective radius of the supergiant stars. A lifetime of $\sim$600 years has been established for these stars. A figure of approximately 50 supergiant stars in the visible universe has been obtained by extrapolation of the luminosity function of the stars and the number of galaxies (10^9) in a sphere of 2.10^9 ps radius. Despite an error in evluation, there is a coincidence with observations made of some 35 supergiant stars. The described model of such a star will most probably break up and form star associations or star clusters. The authors express gratitude to their colleague I. Nedyalkov for useful discussions and for his interest in their work. Orig. art. has: 16 formulas.

SUB CODE: 03/ SUBM DATE: 25May65/ ORIG REF: 008/ OTH REF: 055/

Card 2/2

ACC NR: AR6035555 SOURCE CODE: UR/0269/66/000/010/0076/0076

AUTHOR: Kalinkov, M.; Nedyalkov, I. V.

TITLE: A new hypothesis on quasars

SOURCE: Ref. zh. Astronomiya, Abs. 10.51.568

REF SOURCE: Sb. Gravitatsiya i teoriya otnositel'n. Vyp. 2. Kazan', Kazansk. un-t, 1965, 125-129

TOPIC TAGS: supernova, photon, quasar

ABSTRACT: A quasar model in which the massive central body is surrounded with a cloud of ordinary stars is discussed. It is supposed that the central body structure is a spherical plasma shell limiting the space filled with photon gas. Such an object can expand, shrink or remain in neutral equilibrium. Stars drop on the body continuously and explode as supernovas, thus providing for the required release of energy. Bibliography of 21 titles. [Translation of abstract] [DW]

SUB CODE: 03/

Card 1/1 UDC: 523.12

PHASE I BOOK EXPLOITATION SOV/5576

Akademiya nauk SSSR. Astronomicheskiy sovet.

Byulleten; stantsiy opticheskogo nablyudeniya iskusstvennykh sputnikov Zemli. no. 8 (18) (Bulletin of the Stations for Optical Observations of Artificial Earth Satellites. No. 8 (18) Moscow, 1960. 23 p. 500 copies printed.

Sponsoring Agency: Astronomicheskiy sovet Akademii nauk SSSR.

Resp. Ed.: G. A. Leykin; Ed.: D. Yu. Shchegolev; Secretary: O. A. Severnaya.

PURPOSE: This bulletin is intended for scientists and engineers concerned with optical tracking of artificial satellites.

COVERAGE: The bulletin contains seven articles concerned with methods and equipment used for the photographic observation of artificial earth satellites, the brightness of satellites and equipment for its determination, and the results of photographic observation of satellites. No personalities are mentioned. There are 14 references, all Soviet.

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Bulletin of the Stations (Cont.)

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AVAILABLE: Library of Congress

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10-27-61

S/035/61/000/010/033/034
A001/A101

3.2300

AUTHORS: Nikolov, N.S., Kalinkov, M.P.

TITLE: Period of changes in the brightness of the rocket of the 3rd Soviet artificial Earth's satellite according to observations at the Sofia Astronomical Observatory

PERIODICAL: Referativnyy zhurnal. Astronomiya i Geodeziya, no. 10, 1961, 77, abstract 10A571 ("Byul. st. optich. nablyudeniya iskusstv. sputnikov Zemli", 1960, no. 8, 12 - 14)

TEXT: The authors present the results of observations of the brightness of the Sputnik III rocket conducted at the Sofia Astronomical Observatory from July 29 to August 18, 1958. A graph of time variation of the period has been plotted.

[Abstracter's note: Complete translation]

Card 1/1

NIKOLOV, N.S.; KALINKOV, M.P.

Observations of anomalous Perseids in Sofia. Astron.tsir. no.227:26-27 F '62. (MIRA 16:1)

1. Sofiyskaya astronomicheskaya observatoriya.
(Meteors—August)

BALCHEV, G., dotsent; KALINKOV, St.

Remote results of arthroplasty with or without interposition in various forms of tuberculous coxitis. Khirurgiia 15 no.2/3: 224-228 '62.

1. Iz Bolnitsa za kostno-stavna tuberkuloza - Pancharevo.
(TUBERCULOSIS OSTEOARTICULAR surg)
(HIP dis)

KALINKOVA, G.

Adsorption in the precipitation of $BaSO_4$ at various pH's. Zhur. neorg. khim. 5 no.8:1890-1891 Ag '60. (MIRA 13:9)
(Barium sulfate) (Adsorption)

KALINKOVA, G.

Complexometric methods of determining the calcium and magnesium content in sheep's milk. Vop.pit. 22 no.1:62-65 Ja-F'63 (MIRA 16:11)

1. Iz Nauchno-issledovatel'skogo instituta molochnoy promyshlennosti, Sofiya, Bolgariya.

KALINKOVA, G.

Application of ion metabolism in food industry. Prirода Bulg 12 no. 1: 65-68 Ja-F '63.

ESKIN, V.A., podpolkovnik meditsinskoy sluzhby; DANDUROV, Yu.V., kapitan meditsinskoy sluzhby; KALINKOVSKIY, I.S., kapitan meditsinskoy sluzhby

Net for insect protection. Voen.-med.zhur. no.6:89-90 Je '59. (MIRA 12:9)

(MOSQUITOES
canopy for protection (Rus))

KALINNIKOV, A. V.

Burovoe Delo (Drilling), Moscow, 1949.

KALINNIKOV, Andrey Vsevolodovich, professor; LEVINOV, B.Ya., redaktor; PAVZNER, V.I., tekhnicheskiy redaktor

[Boring] Burovoe delo. Izd. 2-oe, perer. Moskva, Gos. izd-vo selkhoz. lit-ry, 1956. 366 p. (MLRA 9:8)
(Boring)

L 63279-65 EFP(c)/EWP(j)/EWT(1)/EWT(m)/EWG(m)/T Pc-4/Pr-4 RWJ/RM/JG

ACCESSION NR: AP5016265 UR/0258/65/005/003/0459/0468
539.374

AUTHOR: Kalinnikov, A. Ye. (Moscow)

TITLE: Thermodynamic analysis of the relationship between stresses and deformations for polymer type media

SOURCE: Inzhenernyy zhurnal, v. 5, no. 3, 1965, 459-468

TOPIC TAGS: thermodynamics, irreversible thermodynamics, deformation rate, deformation tensor, plastic deformation, elastic deformation, stress load, polymer

ABSTRACT: A detailed analysis is made of the deformation tensor structure $\hat{\varepsilon}_{ij}$, followed by a thermodynamic analysis of inelastic deformation. The deformation tensor $\hat{\varepsilon}_{ij}$ is divided

tensor ε_{ij} is divided into four components

$$e_{ij} = e^{e}_{ij} + e^{p}_{ij} + e^{ve}_{ij} + e^{pc}_{ij}$$

where ε^{e}_{ij} is the instantaneous inelastic deformation, ε^{p}_{ij} is the instantaneous plastic deformation, ε^{ve}_{ij} is the time dependent deformation (inelastic), and ε^{pc}_{ij} is the plastic time dependent deformation. Under conditions of loading, the tensor is given by

$$[e_{ij}]_{t} = [e^{e}_{ij} + e^{p}_{ij}]_{t} + [e^{pc}_{ij}]_{t}$$

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ACCESSION NR: AP5016265

and under conditions of unloading, by

$$[\sigma_{ij}]_{t>t_0} = [e^{p}_{ij}]_{t_0} + [e^{pc}_{ij}]_{t_0} + [e^{ec}_{ij}]_{t>t_0}.$$

The first law of thermodynamics for the deforming system is given by

$$TS_{,t} = \operatorname{div} J_T - \left(S + \frac{\partial I}{\partial T}\right) T_{,t} +$$

$$+ \left(\sigma_{ij} - \frac{\partial F}{\partial e^{e}_{ij}}\right) e^{e}_{ij,t} + \left(\sigma_{ij} - \frac{\partial F}{\partial e^{pc}_{ij}}\right) e^{pc}_{ij,t} + \left(\sigma_{ij} - \frac{\partial F}{\partial e^{p}_{ij}}\right) e^{p}_{ij,t}$$

and the entropy of the system, by

$$S_{,t} = \operatorname{div} J_s + \varkappa,$$

$$J_s = T^{-1} J_T,$$

$$\varkappa = T^{-1}\left(T^{-1} J_T \operatorname{grad} T + (\sigma_{ij} - \sigma^{e}_{ij}) e^{e}_{ij,t} + (\sigma_{ij} - \sigma^{p}_{ij}) e^{p}_{ij,t}\right),$$

$$\sigma^{ec}_{ij} = \frac{\partial F}{\partial e^{ec}_{ij}}, \quad \sigma^{p}_{ij} = \frac{\partial F}{\partial e^{p}_{ij}}.$$

The entropy equation is the sum of an interaction term between the system and the

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surroundings and a local increase in entropy. Using the above expressions for [illegible] the [illegible]

$$\varepsilon'_{ij} = \frac{1}{2G}(\sigma_{ij} - \lambda\theta\delta_{ij}) + \alpha(T - T_0)\delta_{ij},$$

$$\lambda = \frac{E\nu}{(1-2\nu)(1+\nu)}, \qquad G = \frac{E}{2(1+\nu)},$$

for ε^{vc}_{ij} $\frac{\partial F_{vc}}{\partial J_1^{vc}} e^{vc}_{ij} = \frac{\partial D^*}{\partial J_2} a^{vc}_{ij,t}$

where the deviator $\tilde{\sigma}^{vc}_{ij}$ formally determines the internal microstresses, and for ε^{p}_{ij}

$$e^{p}_{ij} = \frac{3\varepsilon_i^p}{2\sigma_i}\tilde{\sigma}_{ij}$$

which depends on the magnitude of the acting stress and its history. Three applications are discussed for the above analysis. These include: the case of active loading, $d\sigma_i > 0$, the case of a time lag